

# Multidisciplinary collaborative guidance on the assessment and treatment of patients with Long COVID: A compendium statement

**TABLE 1:** Common Long COVID symptoms and differential diagnoses to consider during assessment<sup>†</sup>

| Symptom Category   | Common Symptoms  | Differential Diagnoses to Consider (New, Worsening, or Underlying)   |
|--|--|--|
| <b>Physical fatigue<sup>2</sup></b><br>       | <ul style="list-style-type: none"> <li>Severe exhaustion after minimal physical, cognitive, or emotional exertion</li> <li>The sense of being weighed down all day</li> <li>Post-exertional malaise (PEM)/Post-exertional symptom exacerbation (PESE): "Crashing" after having a "good day" of increased activity level, requiring several days of recovery.<sup>51</sup></li> <li>Persistent tiredness or exhaustion after sleep/upon waking</li> </ul> | <ul style="list-style-type: none"> <li>MCAS<sup>52</sup></li> <li>Autoimmune/inflammatory disorders</li> <li>Cardiopulmonary disorders</li> <li>Sleep disorders/deprivation</li> <li>Psychiatric disorders</li> <li>Medication side effects</li> <li>Malignancies</li> </ul>   |
| <b>Breathing, respiratory<sup>4</sup></b><br> | <ul style="list-style-type: none"> <li>Dyspnea at rest or disproportionate dyspnea with activity</li> <li>Chest discomfort: pain, tightness, constriction, and/or pressure</li> <li>Inability to take a full deep breath</li> <li>New or progressive cough or chest congestion</li> </ul>  | <ul style="list-style-type: none"> <li>Non-pulmonary contributions (e.g., neurologic, cardiovascular, neuromuscular)</li> <li>Other pulmonary and airway conditions (e.g., asthma)</li> </ul>  |
| <b>Cardiovascular<sup>5</sup></b><br>         | <ul style="list-style-type: none"> <li>Chest pain, palpitations, or racing heart</li> <li>Dyspnea, exercise intolerance, fatigue, dizziness</li> <li>Autonomic dysfunction</li> <li>Leg swelling, orthopnea</li> </ul>   | <ul style="list-style-type: none"> <li>Complex arrhythmias</li> <li>Structural heart disease and/or ventricular dysfunction</li> <li>Coronary heart disease</li> <li>Myocarditis/pericarditis</li> </ul>   |
| <b>Autonomic<sup>6</sup></b><br>             | <ul style="list-style-type: none"> <li>Dizziness or lightheadedness with postural changes</li> <li>Pre-syncopal or syncopal episodes</li> <li>Any other autonomic symptoms (e.g., racing heart, temperature intolerance, changes to digestion, perspiration)</li> </ul>  | <ul style="list-style-type: none"> <li>Vertigo or other vestibular pathology</li> <li>Sleep disorders/deprivation</li> <li>MCAS</li> <li>Cardiac abnormalities</li> <li>Small fiber neuropathy</li> <li>Hypermobility spectrum disorders</li> </ul>  |
| <b>Cognitive impairment<sup>3</sup></b><br> | <ul style="list-style-type: none"> <li>Executive function, processing speed, memory, attention, word-finding difficulty (a.k.a., brain fog)</li> <li>Mental fatigue: Decrease in cognitive ability when participating in tasks requiring sustained attention and executive function</li> <li>Cognitive symptoms independent of deficits from primary sleep dysfunction (e.g., daytime sleepiness) or lack of motivation</li> </ul>                       | <ul style="list-style-type: none"> <li>B12 deficiency</li> <li>Hypothyroidism</li> <li>Mood disorders</li> <li>Sleep disorders/deprivation</li> <li>ADHD</li> <li>Underlying infectious etiology (e.g., latent syphilis)</li> </ul>  |
| <b>Mental health<sup>9</sup></b><br>        | <ul style="list-style-type: none"> <li>Depression, especially anhedonia</li> <li>Anxiety, including panic</li> <li>PTSD, which can manifest as grief, survivor's remorse, or suicidal ideation</li> <li>Psychosis, OCD (less common)</li> </ul>  | <ul style="list-style-type: none"> <li>Cardiorespiratory disorders</li> <li>Cognitive or sleep disorders</li> <li>Primary fatigue or dysautonomia</li> <li>Primary or other secondary causes of mental health symptoms</li> </ul>  |
| <b>Neurologic<sup>8</sup></b><br>           | <ul style="list-style-type: none"> <li>Neuropathic pain or other sensation (e.g., internal feeling of vibration, change in pain/temperature sensation)</li> <li>Muscle or joint pain</li> <li>Headaches</li> <li>Sleep dysfunction</li> <li>Focal or diffuse weakness, tremors, or gait changes</li> <li>Changes in hearing, vision, taste, smell, swallowing (i.e., cranial nerve abnormalities)</li> </ul>   | <ul style="list-style-type: none"> <li>Small fiber neuropathy</li> <li>Central nervous system lesions (e.g., vasculitis, stroke, demyelinating or neurodegenerative conditions)</li> <li>Peripheral nervous system lesions (e.g., AIDP, GBS)</li> <li>Vitamin deficiency (e.g., B1, B6, B12)</li> <li>Paraneoplastic conditions (e.g., NMDA receptor encephalitis)</li> <li>Sleep disorders/deprivation</li> </ul> |

<sup>†</sup>Other symptoms not in this table can also be associated with Long COVID, including vision changes and eye redness; tinnitus; smell and taste changes; abdominal pain, bowel habit changes, and heartburn; rashes and hair loss; symptoms of mast cell dysfunction such as with MCAS (e.g., episodic itching, flushing, hives, rhinitis, tachycardia, dyspnea, abdominal pain, diarrhea, and/or headache);<sup>62</sup> and changes in menstrual cycles and fertility.<sup>63</sup>

Abbreviations: PEM (post-exertional malaise), PESE (post-exertional symptom exacerbation), MCAS (mast cell activation syndrome), ADHD (attention-deficit/hyperactivity disorder), PTSD (post-traumatic stress disorder), OCD (obsessive-compulsive disorder), AIDP (acute inflammatory demyelinating polyneuropathy), GBS (Guillain-Barré Syndrome), NMDA (N-methyl-D-aspartate).

